

I CLAIM:

1 1. A telecommunications system for provisioning an inter-provider
2 internet protocol (IP) service, comprising:

3 a first network associated with a first service provider, said first network
4 having a plurality of resources;

5 a second network associated with a second service provider, said second
6 network having a plurality of resources, said second network being operable to
7 receive a request for the inter-provider IP service;

8 means for determining real-time availability of first ones of the plurality of
9 resources of said first network needed for the inter-provider IP service and real-time
10 availability of second ones of the plurality of resources of said second network needed
11 for the inter-provider IP service; and

12 means for automatically provisioning the inter-provider IP service using the
13 first resources and the second resources.

1 2. The telecommunications system of Claim 1, further comprising:

2 means for advertising the availability of the plurality of resources of said first
3 network and the availability of the plurality of resources of said second network
4 between said first network and said second network.

1 3. The telecommunications system of Claim 1, further comprising:

2 a unified and integrated switch connected to said first network and said second
3 network, said unified and integrated switch having common resources, a first portion
4 of the common resources being dedicated to the first service provider and being
5 capable of being configured by the first service provider, a second portion of the
6 common resources being dedicated to the second service provider and being capable
7 of being configured by the second service provider.

1 4. The telecommunications system of Claim 3, wherein said unified and

2 integrated switch includes a first logical communications node associated with the
3 first service provider and capable of being dynamically configured in a customized
4 manner by the first service provider and a second logical communications node
5 associated with the second service provider and capable of being dynamically
6 configured in a customized manner by the second service provider.

1 5. The telecommunications system of Claim 3, wherein said unified and

2 integrated switch is within said first network, the first service provider being a
3 wholesale service provider, the second service provider being a retail service
4 provider.

1 6. The telecommunications system of Claim 1, further comprising:

2 means for calculating cost information for use of the first resources and the
3 second resources for the inter-provider IP service, the cost information including a
4 cost for the first resources and a cost for the second resources.

1 7. The telecommunications system of Claim 6, further comprising:

2 means for creating an electronic contract between the first service provider
3 and the second service provider using the cost information.

1 8. The telecommunications system of Claim 6, wherein said means for
2 calculating comprises:

3 a software engine configured to receive the request for the inter-provider IP
4 service, calculate pricing scenarios using the request, obtain real-time resource
5 information, calculate real-time prices for each of the pricing scenarios using the real-
6 time resource information and customize the cost information based on the first
7 service provider, the second service provider, the request and the real-time prices.

1 9. The telecommunications system of Claim 8, further comprising:

2 a database for storing the real-time resource information.

1 10. The telecommunications system of Claim 9, wherein said means for
2 provisioning includes an operational support system connected to said software
3 engine and said database, said operational support system being further configured to
4 manage the inter-provider IP service in real-time.

1 11. A method for provisioning an inter-provider internet protocol (IP)
2 service across at least two service providers, comprising:
3 receiving a request for the inter-provider IP service;
4 determining real-time availability of resources of the at least two service
5 providers needed for the inter-provider IP service; and
6 automatically provisioning the inter-provider IP service between the at least
7 two service providers using the determined resources.

1 12. The method of Claim 11, further comprising:
2 advertising the availability of the resources of the at least two service
3 providers between the at least two service providers.

1 13. The method of Claim 11, further comprising:
2 providing a unified and integrated switch for the at least two service providers,
3 the unified and integrated switch having common resources;
4 configuring a first portion of the common resources dedicated to the first
5 service provider by the first service provider; and
6 configuring a second portion of the common resources dedicated to the second
7 service provider by the second service provider.

1 14. The method of Claim 13, further comprising:
2 dynamically configuring in a customized manner a first logical
3 communications node by the first service provider; and
4 dynamically configuring in a customized manner a second logical
5 communications node by the second service provider.

1 15. The method of Claim 13, wherein the first service provider is a
2 wholesale service provider and the second service provider is a retail service provider.

1 16. The method of Claim 11, further comprising:
2 calculating cost information for use of the resources of the first service
3 provider and the second service provider for the inter-provider IP service.

1 17. The method of Claim 16, further comprising:
2 creating an electronic contract between the first service provider and the
3 second service provider using the cost information.

1 18. The method of Claim 16, wherein said calculating comprises:
2 calculating pricing scenarios using the request;
3 obtaining real-time resource information;
4 calculating real-time prices for each of the pricing scenarios using the real-
5 time resource information; and
6 customizing the cost information based on the first service provider, the
7 second service provider, the request and the real-time prices.

1 19. The method of Claim 18, further comprising:
2 collecting the real-time resource information; and
3 storing the real-time resource information.

1 20. The method of Claim 19, wherein said provisioning further
2 comprising:
3 managing the inter-provider IP service in real-time.

1 21. The method of Claim 11, wherein said provisioning further
2 comprising:

3 incorporating network infrastructure and resources in said provisioning;

4 incorporating business relations among the at least two service providers
5 dynamically and in real-time in said provisioning, wherein the business relations
6 include at least contracts and prices; and

7 incorporating business objectives in said provisioning, wherein the business
8 objectives include at least one of financial ratios, service volume and profitability.